



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/589,974	08/18/2006	Kazuhito Niwano	295156US2PCT	2197

22850 7590 05/26/2010
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

LEBASSI, AMANUEL

ART UNIT	PAPER NUMBER
----------	--------------

2617

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

05/26/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/589,974	Applicant(s) NIWANO, KAZUHITO	
	Examiner AMANUEL LEBASSI	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 1-14 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1- 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hwang et al. US 6414943 in view of Rydnell et al. US 6519469.

Regarding claim 1, Hwang discloses a mobile station (**col. 3, lines 51-52 - a mobile station**). Hwang discloses a transmit buffer for storing data about a plurality of communication services on a communication-service-by-communication-service basis or on a transmit-channel-by- transmit-channel (**col. 3, lines 51-52 – where the mobile station 1 includes a transmit buffer 1b for temporarily storing transmit data according to the requested radio data service**). Hwang discloses an amount-of-data information determining means for examining the data which are stored in said transmit buffer on a communication-service-by-communication-service basis or on a transmit-

channel-by-transmit-channel so as to determine communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information (**col. 3, lines 51-58 where the transmit buffer is examined**) and a transmitting means for transmitting the communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information determined by said amount-of-data information determining means to a base station (**see Fig. 1 and col. 3, lines 52-58 where a transmitter transmits the amount-of-data to the radio service (Base Station)**).

Hwang is silent on disclosing means for monitoring the data which are stored in said transmit buffer. However, Rydnell teaches monitoring the data which are stored in said transmit buffer (**col. 5, lines 57 – col. 6, line2 where the downlink data is monitored**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the inventions of Hwang and add that of Rydnell. The motivation would be to allow the mobile telephone to quickly establish an uplink and downlink Medium Access Control transaction (**col. 1, lines 11-15**).

Regarding claim 2, Hwang discloses wherein said amount-of-data information determining means converts the communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information into a binary digit number, and outputs the amount-of-data

information indicating the binary digit number to the transmitting means (see Fig. 1, where the data is digitally transmitted therefore binary).

Regarding claim 3, Hwang discloses wherein said amount-of-data information determining means converts the communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information into a data occupation ratio of the transmit buffer, and outputs the amount-of-data information indicating the data occupation ratio to the transmitting means.

Regarding claim 4, Hwang discloses wherein said amount-of-data information determining means converts the communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information into a time, and outputs the amount-of-data information indicating the time to the transmitting means (**col. 4, lines 46-col. 5, lines 6**).

Regarding claim 5, Hwang discloses wherein said amount-of-data information determining means converts the communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information into a transmission rate, and outputs the amount-of-data information indicating the transmission rate to the transmitting means (**col. 1, lines 51-56**).

Regarding claim 6, Hwang discloses wherein said amount-of-data information determining means converts the communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information into a number of bits per second or a number of bits per unit time **(col. 1, lines 51-56 – data rate i.e. bits per second)**.

Regarding claim 7, Hwang discloses wherein said amount-of-data information determining means converts the communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information into a channel amplitude coefficient or a channel amplitude coefficient ratio, and outputs the amount-of-data information indicating the channel amplitude coefficient or the channel amplitude coefficient ratio to the transmitting means (col. 4, lines 25-37).

Regarding claim 8, Hwang discloses wherein said amount-of-data information determining means converts the communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information into a power dimension or a power dimension ratio, and outputs the

amount-of-data information indicating the power dimension or the power dimension ratio to the transmitting means (abstract).

Regarding claim 9, the combination of above discloses wherein said amount-of-data information determining means outputs an index indicating a combination of pieces of communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information to the transmitting means, instead of the communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information (see above).

Regarding claim 10, Hwang discloses a base station comprising a receiving means for receiving communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information from a mobile station (**Fig. 1 and col. 3, lines 59-65 - where the network / BTS receives a transmit data**). Hwang discloses an assignment examining means for examining assignment of radio resources for data on a communication-service-by-communication-service or transmit-channel-by-transmit-channel basis according to the communication-service-by-communication-service or transmit-channel-by-transmit-channel amount-of-data information received by said

receiving means (**col. 3, lines 59-65 where the transmit buffer is examined**) and a notifying means for notifying transmission control information indicating the assignment of radio resources determined by said assignment determining means to said mobile station (**Fig. 1 and lines 45-65**).

Hwang is silent on disclosing determining assignment of radio resources for data. However, Rydnell teaches determining assignment of radio resources (**col. 5, lines 24-33 and claim 4, where the said resource assigns at least one time slot**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the inventions of Hwang and add that of Rydnell. The motivation would be to allow the mobile telephone to quickly establish an uplink and downlink Medium Access Control transaction (**col. 1, lines 11-15**).

Regarding claim 11, Hwang discloses a communication system provided with a base station which notifies transmission control information indicating a data transmission timing, and a mobile station which transmits data to said base station according to the transmission control information notified from said base station (**col. 4 lines 24-31 where the mobile station 1 sends the data corresponding to the radio packet data service or control signals, temporarily stored in the transmit buffer 1b, to the network 2 with the plural radio bearers at the data rate**). Hwang discloses the said mobile station

comprising includes: a transmit buffer for storing data about a plurality of communication services on a communication-service-by-communication-service basis or on a transmit-channel-by-transmit-channel (col. 3, lines 51-52 – where the mobile station 1 includes a transmit buffer 1b for temporarily storing transmit data according to the requested radio data service). Hwang discloses an amount-of-data information determining means for examining the data which are stored in said transmit buffer on a communication-service-by-communication-service basis or on a transmit-channel-by-transmit-channel basis so as to determine communication-service- by-communication-service or transmit-channel-by-transmit-channel amount-of-data information (col. 3, lines 51-58 where the transmit buffer is examined) and a transmitting means for transmitting the communication-service-by- communication-service or transmit-channel-by-transmit-channel amount-of-data information determined by said amount-of-data information determining means to said base station (Fig. 1, a transmitting means that transmits and col. 4, lines 24-32 where the transmitter transmits to the network 2 the data corresponding to the radio packet data service or control signals). Hwang discloses where the said base station comprising : a scheduler for assigning resources used for carrying out data transmission to said mobile station on a communication-service-by-communication-service basis or on a transmit- channel-by-transmit-channel basis according to the amount-of-data information received from said mobile station (col. 4, lines 38-62).

Hwang is silent on disclosing means for monitoring the data which are stored in said transmit buffer. However, Rydnell teaches monitoring the data which are stored in said transmit buffer (**col. 5, lines 57 – col. 6, line 2 where the downlink data is monitored**).

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the inventions of Hwang and add that of Rydnell. The motivation would be to allow the mobile telephone to quickly establish an uplink and downlink Medium Access Control transaction (**col. 1, lines 11-15**).

Regarding claim 12, Hwang discloses an amount-of-data information transmission method (abstract- **method and apparatus for controlling asymmetric dynamic radio bearers in a mobile packet data communications system**). Hwang discloses examining data which are transmitted from a terminal on a communication-service-by-communication-service basis or on a transmit-channel-by-transmit-channel basis (**col. 3, lines 51-58 where the transmit buffer is examined**). Hwang discloses determining amount-of-data information indicating an amount of data on a communication-service-by-communication-service basis or on a transmit-channel-by-transmit-channel basis (**col. 5, lines 56-63 where the amounts of data stored in the transmit buffers is determined**) and transmitting the amount-of-data

Art Unit: 2617

information which is determined on a communication-service-by-communication-service basis or on a transmit-channel-by- transmit-channel basis to a base station **(see Fig. 1 and col. 3, lines 52-58 where a transmitter transmits the amount-of-data to the radio service (Base Station))**.

Hwang is silent on disclosing monitoring the data which are transmitted. However, Rydnell teaches monitoring the data which are transmitted **(col. 5, lines 57 – col. 6, line2 where the downlink data is monitored)**.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the inventions of Hwang and add that of Rydnell. The motivation would be to allow the mobile telephone to quickly establish an uplink and downlink Medium Access Control transaction **(col. 1, lines 11-15)**.

Regarding claim 14, Hwang discloses a wireless communication method **(see abstract, mobile packet data communications system)**. Hwang discloses when data about a plurality of communication services are stored in transmit buffers on a communication-service-by-communication-service basis or on a transmit-channel-by- transmit-channel basis, examining the data which are stored in the transmit buffers on a communication-service-by-communication-service basis or on a transmit-channel-by- transmit-channel basis **(col. 3, lines 51-58 where the transmit buffer is examined)**. Hwang discloses determining

Art Unit: 2617

amount-of-data information indicating an amount of data on a communication-service-by-communication-service basis or on a transmit-channel-by- transmit-channel basis (**col. 5, lines 56-64 the amounts of data stored in the transmit buffers is determined**). Hwang discloses transmitting the amount-of-data information which is determined on a communication-service-by-communication-service basis or on a transmit-channel-by- transmit-channel basis to a base station (**see Fig. 1 and col. 3, lines 52-58 where a transmitter transmits the amount-of-data to the radio service (Base Station)**). Hwang discloses when the base station receives the amount-of-data information which is determined on a communication-service-by-communication-service basis or on a transmit-channel-by- transmit-channel basis from a mobile station, determining a data transmission timing on a communication-service-by-communication-service basis or on a transmit-channel-by- transmit-channel basis according to the amount-of-data information **col. 4, lines 24-31 where the base station receives amount-of-data information and col. 4, lines 38-56 where the data transmission timing is determined**). Hwang discloses notifying transmission control information indicating the data transmission timing to said mobile station (**col. 1, lines 49-52 where the network informs the mobile station of the data**) and said mobile station transmitting the data to said base station on a communication- service-by-communication-service basis or on a transmit-channel-by-transmit-channel basis according to the transmission control information notified from said base station (**col. 3, lines 52-58 where a**

Art Unit: 2617

transmitter transmits the amount-of-data to the radio service (Base Station)).

Hwang is silent on disclosing means for monitoring the data which are stored in said transmit buffer. However, Rydnell teaches monitoring the data which are stored in said transmit buffer **(col. 5, lines 57 – col. 6, line2 where the downlink data is monitored).**

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the inventions of Hwang and add that of Rydnell. The motivation would be to allow the mobile telephone to quickly establish an uplink and downlink Medium Access Control transaction **(col. 1, lines 11-15).**

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 13 is rejected under 35 U.S.C. 102(b) as being unpatentable by Hwang et al. US 6414943.

Regarding claim 13, Hwang discloses a transmission-control-information notification method (**col. 4 lines 24-31 where the mobile station 1 sends the data corresponding to the radio packet data service or control signals**).

Hwang discloses when a base station receives amount-of-data information which is determined on a communication-service-by-communication-service basis or on a transmit-channel-by- transmit-channel basis from a mobile station, determining a data transmission timing on a communication-service-by-communication-service basis or on a transmit-channel-by- transmit-channel basis according to the amount-of-data information (**col. 4, lines 24-31 where the base station receives amount-of-data information and col. 4, lines 38-56 where the data transmission timing is determined**) and notifying transmission control information indicating the data transmission timing to said mobile station (**col. 1, lines 49-52 where the network informs the mobile station of the data**).

Conclusion

1. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Amanuel Lebassi, whose telephone number is (571) 270-5303. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached at (571) 272-7876. The fax phone number for

Art Unit: 2617

the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Amanuel Lebassi
/A. L./
05132010

/NICK CORSARO/
Supervisory Patent Examiner, Art Unit 2617